

# Test Report

No. LPCI/08077/09  
CTS Ref. CTS/09/1955/Toray

Date : 21/05/2009

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**TORAY PLASTICS (MALAYSIA) SDN. BHD.**  
2628 MK. 1, SPT. LORONG PERUSAHAAN 4, PRAI FREE INDUSTRIAL ZONE,  
13600 PRAI, PENANG, MALAYSIA.

The following merchandise was (were) submitted and identified by the client as:

Sample Description : "TOYOLAC" ABSG 100G-30  
Sample Received : 15/05/2009  
Testing Date : 15/05/2009 to 21/05/2009

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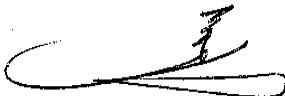
Test Requested : In accordance with the RoHS Directive 2002/95/EC, and its amendment directives.

Test Method : Please refer to next page(s).

Test Results : Please refer to next page(s).

Analysts : Ng Mei Kheng & Yee Sook Wai

SGS LABORATORY SERVICES (M) SDN. BHD.



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LAB MANAGER

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Test results:

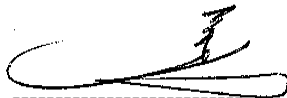
Test Part Description :

Sample Description : "TOYOLAC" ABSG 100G-30

## **RoHS Directive 2002/95/EC**

Test Item(s):	Unit	Test Method	Results	MDL
Cadmium(Cd)	mg/kg	With reference to BS EN 1122:2001, Method B, and performed by ICP-OES	N.D.	2
Lead (Pb)	mg/kg	With reference to EPA Method 3050B, and performed by ICP-OES	N.D.	2
Mercury (Hg)	mg/kg	With reference to EPA Method 3052, and performed by ICP-OES	N.D.	2
Hexavalent Chromium (CrVI)	mg/kg	With reference to EPA Method 3060A & 7196A, and performed by UV-VIS Spectrophotometry	N.D.	2
<b>Sum of PBBs</b>	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	-
Monobromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Dibromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Tribromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Tetrabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Hexabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Pentabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Heptabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Octabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Nonabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Decabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5

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Test Item(s):	Unit	Test Method	Results	MDL
<b>Sum of PBDEs</b>	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	-
Monobromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Dibromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Tribromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Tetrabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Pentabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Hexabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Heptabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Octabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Nonabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5
Decabromodiphenyl ether ##	mg/kg	With reference to EPA Method 3540C/3550B, and performed by GC-MS	N.D.	5

- Note :
- (a) mg/kg = ppm ; (0.1wt% = 1000ppm)
  - (b) N.D. = Not Detected
  - (c) MDL = Method Detection Limit
  - (d) ## = The exemption of DecaBDE in polymeric application according 2005/717/EC was overruled by the European Court of Justice by its decision of 01.04.2008. Subsequently DecaBDE is included in the sum of PBDE after 01.07.2008
  - (e) - = Not regulated

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### Test Part Description :

Sample Description : "TOYOLAC" ABSG 100G-30

**TORAY PLASTICS (MALAYSIA) SDN. BHD.**  
**LPCI/08077/09**

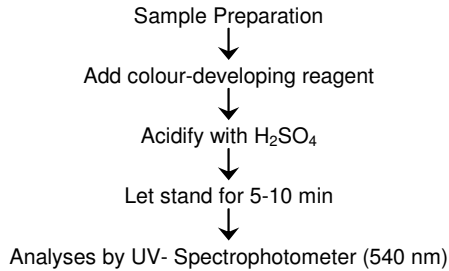


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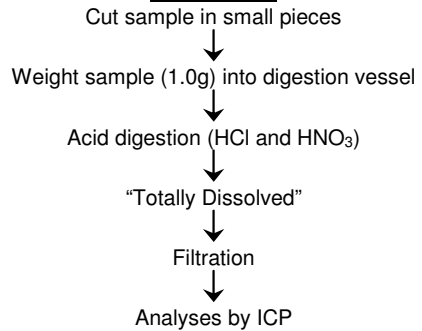
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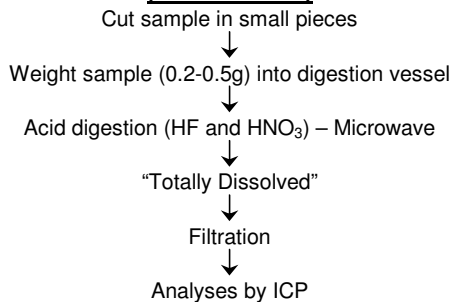
**1. DETERMINATION OF HEXAVALENT CHROMIUM BY METHOD US EPA 3060A/7196A**



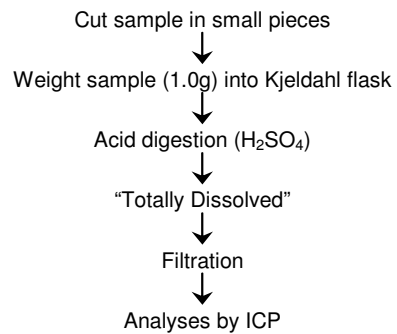
**2. DETERMINATION OF LEAD CONTENT BY US EPA 3050B**



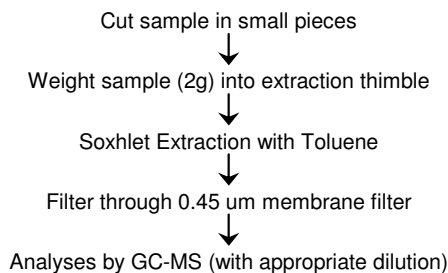
**3. MICROWAVE ASSISTED ACID DIGESTION OF SILICEOUS AND ORGANICALLY BASED METRICES (US EPA 3052)**



**4. PLASTIC – DETERMINATION OF CADMIUM – WET DECOMPOSITION METHOD (EN 1122) – METHOD B**

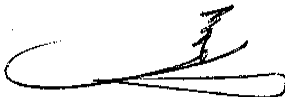


**5. DETERMINATION OF PBB/PBDE WITH GC-MS**



\*\*\*\* End of Report \*\*\*\*

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